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BIRDSNESTING:

BEING A COMPLETE DESCRIPTION OF THE NESTS AND EGGS OF BIRDS WHICH BREED IN GREAT BRITAIN AND IRELAND

By EDWARD NEWMAN, F.L.S., F.Z.S.

This work is written expressly for the use of out-of-door naturalists and that better class of schoolboys who take up Natural History as an instructive recreation. Under each species will be found—

1. The English name.
2. The Latin name.
3. The situation in which the nest is to be found.
4. The materials of which the nest is built, together with any particulars of its shape which may assist in determining by what bird it is built.
5. The number and colour of the eggs, describing such variations as are occasionally met with.

In compiling this work the sources whence the author has drawn his information are—

1. His own memoranda.
2. Colonel Montagu's 'Ornithological Dictionary.'
3. Mr. Selby's 'Illustrations of British Ornithology.'
4. Mr. Hewitson's 'Oology.'
5. The 'Zoologist,' not only every volume but every number of which abounds in original and highly important observations on the life-history and distinguishing characters of birds.
6. The 'Letters of Rusticus.'
7. Observations, emendations and additions, by Mr. Bond, of London, and Mr. Doubleday of Epping. With the view of making this work as complete as possible, these two gentlemen, our best British ornithologists, have gone over the list, species by species, and in a manner deserving the warmest and most sincere thanks of all lovers of birds, have corrected whatever they thought erroneous, erased whatever they considered doubtful, and added whatever they considered necessary to make the list complete; so that, as now offered to the public, it must take rank as the most complete descriptive list ever produced on any branch of British Natural History.

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JOHN VAN VOORST, 1, PATERNOSTER ROW.

Letters on Variation in Lepidoptera. By EDWARD NEWMAN.

LETTER THE FIRST.—INTRODUCTION.—SEXUAL VARIATION.

My dear Mr. Wollaston :

I address these letters to you because I thus ensure myself a competent and a candid reader: of all entomologists you have proved yourself the most competent to deal with the mysteries of variation, and of all our scientific writers you are certainly the most candid, giving to every phase of every subject the fullest and most careful consideration, and always deferring to the force of truth, unbiassed by preconceived opinions. Still I venture to think that certain additions may be made to what you have published, just in the same way that we occasionally see a rider tacked on to a Bill in its passage through Parliament, the Bill itself remaining intact and efficient, but the rider filling up some little gap which the original author of the Bill, in his more comprehensive statesmanship, had either overlooked or dismissed as scarcely worthy his consideration.

Of course every man is right in deducing his conclusions from facts he thoroughly understands; and of all men living I believe you are best acquainted with Coleoptera; but this is scarcely sufficient: a man may have studied the comets for half a century, and may theorize logically and beautifully on their periodicity and orbits, but if he forget for a moment that the steady-going, homely, unattractive planets are ever pursuing their monotonous career, he is scarcely qualified to discourse on the solar system.

It seems to me that while lingering so fondly over the Coleoptera, and studying so thoroughly the phases of their climatal variation, and thus adding invaluable stores of knowledge to our favourite Science, you have somewhat contracted the area of research and inquiry; you have, in a word, treated variation as an isolated phenomenon, rather than as a collection of phenomena which require minute investigation and judicious classification before we can render them available: indeed, you treat variation as you would a beautiful and unknown beetle that has just fallen in your path; you make yourself thoroughly master of its structure; from its structure you are led to theorize logically and truthfully on its economy; and finally you contrast it, with a master's pen, with its congeners and relations, and thus reach conclusions which no man can gainsay. In contradistinction to this, I would rather regard variation as a collection of

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beetles naturally but accidentally associated, as we sometimes find them after a flood, a sarcophage and phytophage, the lion and the lamb, lying down together, and haply a necrophage—like the vulture or the hyæna—curiously examining whether death had yet adapted them to his peculiar taste.

But in order to render my simile more intelligible, we may imagine Hymenoptera and other classes of insects also the victims of the flood, and that we are busying ourselves in separating and classifying an assembly of which the component parts are incongruous, although associated by Nature herself. In the first place the phenomena of variation offer a convenient division into normal and abnormal. Normal variations are those which *must inevitably* occur, as from difference of sex, the alternation of generations, or climatal conditions: the first of these has obtained here and there, now and then, a modicum of attention: the second is a perfectly novel field of study—a field hitherto uncultivated; the plough of observation, the harrow of thought, have never touched it: it is still virgin soil; and yet it is certain that a vast proportion, I will not venture to say the majority, of our book species owe their origin to this source: the third has become attractive through the labours of Mr. Darwin and yourself.

There is also another phase of normal variation, which, whether specific or only trivial, is a problem requiring solution. I purpose recapitulating and extending my observations on this branch of the inquiry, and also citing *in extenso* the profound remarks of Professor Westwood, who has evidently given his best attention to—I would say thrown his whole mind into—the subject. I allude to the existence of pairs of insects, as in the instance of Acronycta Psi and A. tridens. This phase of variation, like those resulting from difference of sex or climate, or from alternation of generations, is rendered imperative by some law of Nature hitherto undiscovered.

Abnormal variation stands on a very different footing, and requires a very different mode of treatment: it seems in many instances to be a mere freak of Nature, a kind of *phrenitis* to which she is very subject; but still there is "a method in her madness," a method that demands our most devoted attention: as examples of this method, I need only mention the frequency of albinism in many quadrupeds and birds, and its utter absence from other quadrupeds and birds, however nearly related: this is but one of the hundred phases that abnormal variation is known to assume.

Variation resulting from sex, alternation of generations, climate and pairs, is an evidence of the existence of certain absolute laws. Abnormal variation seems rather to result from a departure from those laws, or to be exceptional; and I would here take the liberty of asserting my belief that exceptions often afford a direct clew to the rules which they seem to nullify, and that he who disregards the exception is incompetent fully to understand and appreciate the rule.

Now, turning to your little volume, which I always read with reverence and love, you will, I am sure, pardon me when I say that I think you have been unfortunate in selecting the Coleoptera as illustrating your views. I am aware coleopterists pride themselves on the greater facilities with which a coleopteron may be examined; it has generally no clothing to interfere with the thorough investigation of its external structure; but the coleopterist has plumed himself too much on this; he has been content with a perfect knowledge of external structure, and therefore has given but little thought to sex, and none whatever to life-history. Now the lepidopterist will be found assiduously studying the female parent in the act of oviposition, will minutely examine the egg, count its longitudinal costæ and transverse striæ, number the days before the larva emerges, and when it has emerged note every ecdysis, and every change of form and colour incident to each; observe in what manner it prepares for pupation, and note with painstaking accuracy the form and colour of the pupa: finally, he watches it burst the sereclothς in which it has been fettered, and assume its ultimate perfection. He thus becomes thoroughly acquainted with his subjects before they attain that point in their existence at which the investigations of the coleopterist begin. He knows that all the produce of one batch of eggs should have one name: they may vary infinitely in size, form and colour, but if the parent be Chelonia caja or Abraxas grossulariata so are the progeny: he never thinks of dividing them: you know, my dear sir, how different all this is with the coleopterist. You know better than I do, how that an additional stria on an elytron, a darker or paler tip to an antenna, is amply sufficient to raise a bembid or a staph to specific rank: you know the coleopterist dotes on these differences; and will print us a hundred pages at the shortest notice in which these differences are to him towers of strength. No lepidopterist has created a species out of either Chelonia caja or Abraxas grossulariata: any coleopterist would have created a hundred had the same difference occurred among beetles, for he could not have consulted life-history.

Until his objects are chloroformed and carded the coleopterist has no knowledge of them whatever; he really ignores all the preparatory stages of their existence, and scarcely alludes to the fact of their having possessed life: it is on this ground that I think the lepidopterist more likely than the coleopterist to appreciate justly the teaching of variation.

Let us then confine our attention to the Lepidoptera on this sole ground, the better knowledge of their preparatory states, the certainty I may say with which we associate all the individuals of one brood, however they may differ.

SEXUAL VARIATION.

1. *Disparity in Size.*—The first difficulty, the primary stumbling-block in our path in every search after truth, is hypothesis: nothing has delayed the truthful explanation of the phenomena of the solar system so effectually as the vague hypotheses so pertinaciously supported by authority; it is thus with every inquiry into the secrets of Nature; and it is because you, my dear sir, dare to look Nature fully in the face, and to inquire what *is*, rather than what *ought to be*, the method she adopts, that I have connected your name with these investigations. On the very threshold of our inquiry into sexual variation we find the Darwinians, or as we may call them the evolutionists, have placed an enormous stumbling-block: they say that the females of insects are larger than the males: in order to establish their views this ought to be so, but it is not. Let the genera Lucanus and Dynastes—they are the most easy of reference—reply. I have urged this repeatedly in conversation, and have compelled those who maintain the hypothesis to take refuge in the Lepidoptera. Allow me to explain my dissent from the now prevalent opinion on this subject, even as regards Lepidoptera.

The diurnal Lepidoptera exhibit a certain amount of disparity in the magnitude of the sexes, and the females have the advantage, but it is only necessary to arrange a series of any species by the size of the individuals, and it will become very evident to those who can readily distinguish the sexes, that the twenty-five smaller individuals are by no means invariably males, nor the twenty-five larger ones females; but the males and females alternate with something approaching to regularity. The largest and most familiar groups of nocturnal Lepidoptera are the Ursinæ, the Geometræ and the Noctuæ, but in neither of these does any rule obtain. Beginning with the

Ursinæ, we find the males larger in Procris, Euchelia and Euthemonia; the females in Callimorpha and Euchelia; the sexes alike in Zygæna, Nola, Nudaria and Arctia. In the Geometræ, the males are larger in Phigalia, Nyssia, Acidalia, Scodiona, Selidosema and Hybernia; while in Urapteryx, Angerona and Amphydasis the females mostly have the advantage; but these are the exceptions: in an overwhelming majority there is no disparity in size, and the same may be said of the Noctuæ. Certain insects are found in each group in which the sexes differ in this respect from their immediate congeners: thus the females of Lithosia quadra, the males of Larentia multistrigata and Miana arcuosa, and the females of Nonagria Typhæ and N. lutosa, are notably larger than the opposite sex, and yet each of these is surrounded by closely allied species in which no such difference obtains.

In reply to these observations it has been urged that the females generally are heavier, although not possessing a greater area of wing surface; but this also is hypothesis, and is not supported by the test of weighing: and were it established that a gravid female exceeded a male in magnitude or weight, we should scarcely render this available, or pertinent to the matter under consideration.

Disparity of Form.—In many of the instances I have mentioned of the males exceeding the females in size, the discrepancy is accompanied by a marked change in form, the wings being partially or entirely absent. In the genus Psyche, which, as at present constituted, is perhaps the most comprehensive genus of Lepidoptera, there is not a single species of which the female presents the slightest appearance of a lepidopterous insect: none of them have wings, a few—a very few—have legs, still fewer scales, and in a great majority of those minutely examined not a trace of antennæ has been found. Nevertheless the males are remarkable for intense and restless activity on the wing, for the possession of perfect legs and for the great development of their plumose antennæ. In a thousand instances the volatile males of Lepidoptera escape the notice of scientific travellers, while the apterous females are seen running like spiders over rocks and on the trunks of trees, and are invariably regarded as creatures Darwinized by isolation or by climatal conditions.

Disparity of Colour.—This is the most familiar, although perhaps the least important, phenomenon in the variations of sex: it appeals directly to our sense of sight, and cannot escape the notice of the most superficial observer: as an instance I need only remind you of the sooty black male, and snowy white female of Arctia mendica. But this branch of my inquiry seems to require a somewhat more precise illustration.

We shall all admit,—at least all candid minds will be willing to make a few preliminary admissions, as thus:—*First*, that the disparity between sexes must be very great before fathers of our Science describe them as distinct species, and before we as humble students seek thus to retain them. *Secondly*, that Linneus and Fabricius are the fathers of our Science; and that Hübner and Haworth are the fathers of this particular branch of the Science, named Lepidopterology. *Thirdly*, that the insects ever present in our gardens, our fields and hedges, and always intruding themselves on our notice by their familiar if not destructive habits, afford us the very best and most ready opportunities of studying Nature's law. I think perhaps half a score examples of this, as well as other phases of variation, will be sufficient to illustrate my meaning. I need scarcely explain that the generic names which I employ are those now in use, not those of the authors whose specific names I have cited.

1. Satyrus Jurtina of Linneus is the female of S. Janira of Linneus.
2. Hepialus Jodutta of Haworth is the female of H. hectus of Linneus.
3. Limacodes Bufo of Fabricius is the female of L. Testudo of Linneus.
4. Lithosia quadra of Linneus is the female of L. deplana of Fabricius.
5. Euthemonia Sannio of Linneus is the female of E. russula of Linneus.
6. Fidonia tiliaria of Linneus is the female of F. piniaria of Linneus.
7. Hybernia incompletaria of Haworth is the female of H. aurantiaria of Linneus.
8. Hybernia luctuaria of Haworth is the female of H. progemmaria of Hübner.
9. Anisopteryx apteraria of Haworth is the female of A. æscularia of the Vienna Catalogue.
10. Camptogramma gemmata of Hübner is the female of C. fluviata of Hübner.

These assertions are not merely dogmatical; they result from actual observation, from the careful breeding of the insects from the egg, and are now universally received as so many simple truisms, and yet no higher authority could possibly be adduced for considering the twenty names I have cited as representing twenty species, but it is not so, for the seemingly overwhelming weight of authority is crushed by the inexorable logic of facts.

Believe me, with every sentiment of respect and esteem, to remain,

Dear Mr. Wollaston,
Faithfully yours,
EDWARD NEWMAN.

Peckham, October 1, 1866.

Ornithological Notes from Norfolk, for December, 1866, *and January and February*, 1867. By HENRY STEVENSON, Esq.

(Continued from S. S. 548).

In spite of the extreme severity of the winter there has been an extraordinary dearth of ornithological rarities, and at no time have our markets exhibited either the quantity or variety of wildfowl not unfrequently met with in far milder seasons. In my last notes (S. S. 595) I alluded to the large number of fowl which passed to the southward in advance of the first snow-storm on the 19th of November, and the same fact was observed at Yarmouth just previous to the very severe weather that commenced on the 1st of January, and, with a short interval between the 5th and 11th, continued up to the evening of the 22nd. The gunners on Breydon did little or nothing, and the shallow waters of the Broads being frozen up presented no attractions for either fowl or waders. As usual, however, in such seasons our resident species suffered greatly, not only from the cold and scarcity of food, but from the incessant persecution of idle hedge-poppers. Large bunches of thrushes, blackbirds and starlings at the poulterers' shops, made one grieve for the loss of so many merry songsters, these being for the most part home-bred birds, the regular migratory flights having passed on to the south long before. Kingfishers of course, deprived by the intense frosts of their ordinary means of subsistence, fell easy victims, in their enfeebled state, to the rage for "plumes," and in Norwich alone over thirty specimens were brought in to our birdstuffers for preservation. I have seen also nearly twenty green woodpeckers, all shot within the same period, but in neither case have I any reason to believe, in this instance, that the number killed has anything to do with migratory arrivals. The French partridges, as usual, bewildered by the snow, were shot in larger numbers out of the fences, and in one instance as many as seventeen brace of birds, chiefly "red-legs," fell to a single gun: many of these birds showed the effects of the weather in their wretchedly poor condition, and even the English birds, in some places, appeared to suffer. As before stated, the denizens of the Broads were all frozen out: the coots, as usual, betook themselves to the salt-marshes and the tidal waters of Breydon, where large quantities were killed by the punt-gunners. Many herons have been also killed, both on the coast and the inland streams and rivers. The waterhens, still reluctant to leave their haunts in the great reed-beds, have died miserably from cold and hunger, or have met a less lingering death from the savage attacks of the gray crows, who have satisfied their carnivorous tastes by destroying all the enfeebled birds they could find. In some cases also the unfortunate waterhens have been found dead on the ice, frozen to the surface by their wings and tails, and in others their tails have been found adhering, the poor birds having lost them in their efforts to get free. The little grebes have been also hard put to it for a living, collecting together in any open water, either in the rivers or drains, and the snipe left us altogether, with the exception of a few frequenting the inland streams, wherever the springs afforded them a chance of food.

Of our usual winter migrants, fieldfares and redwings were extremely numerous, and so tamed by the severity of the season that they visited the gardens close to the city to feast on the few remaining berries. On the 17th of January, when the snow was some eighteen inches deep on the level, I counted upwards of twenty redwings, noisily stripping the rowans from the mountain ash, and, though close to the public road, apparently indifferent to the passers by, many of whom stopped to watch them. About this time bramblings and snow buntings were very plentiful, and a large bunch of greenfinches in the market, all male birds in brilliant plumage, proved, what I have more than once observed before, that with these birds, as with the chaffinch, a severe or long-continued frost brings a migratory arrival of *males* from more northern localities, the females and young of the year having preceded them at the usual period. Siskins have been also very numerous, and some forty or fifty were observed at Beswick during the first week in March, later than I ever observed them before. A few pied wagtails braved the sharpest frosts without seeking more southern quarters, and, as generally happens at such times, several beautiful specimens of the gray wagtail, in brilliant plumage, were killed in the county, and one or two stonechats, shot with other small birds, showed the enduring powers of this sprightly species, which is by many supposed to leave us altogether in winter.

The following are amongst the most noteworthy occurrences of the last three months.

Sea Eagle.—One of these fine birds was seen at Caistor, near Yarmouth, during the hard frost in the first week of January, and I have but recently heard of another shot at Elveden, on the borders of the county, on the 24th of November: another was also killed near Holkham, about the 20th of February, which had frequented that neighbourhood for some days.

Shore Larks.—Since the 28th of November, when a pair of these birds, as recorded by me (S. S. 595), were shot at Beeston, two more, male and female, were killed on the beach at Yarmouth, and on the 5th of January two more, also male and female, were sent me from Salthouse. Of these the male was by far the most perfect in plumage, the gorget and black patch on the cheeks being nearly pure black, and the shoulders very vinous in tint. In the female the yellow was less vivid, and the black portions more suffused with brown; the stomachs contained only a few small black seeds and grit.

Wood Larks.—On the 16th of January, during the most severe weather, a pair of these larks were shot at Beeston, near Cromer, and were, I have no doubt, migratory arrivals, this species being confined almost entirely to the more western parts of the county in summer, and I believe not seen for some weeks during the depth of winter, even in these localities. Only the week before a correspondent in the 'Field' spoke of wood larks being shot and netted by hundreds on the south coast, about Brighton and other places, driven southward by the frost and snow.

Richard's Pipit.—The rarity of the season is unquestionably a specimen of this rare pipit, shot on the north side of Breydon water on the 27th of December, 1866. It is so seldom that an opportunity offers for examining this species in the flesh, and the measurements, as given by authors, vary so considerably, that I append those taken by myself and Mr. Gunn, who stuffed it:—

Length from tip of beak to end of tail - -	8¼ inches.
Wing from carpal joint to end of longest quill -	3⅓ „
Extent from tip to tip of wings - - -	12¼ „

Beak along the upper mandible	⅝ths of an inch.
Tail	3¾ inches.
Tarsi	1¼ inch.
Middle toe and claw	1¼ „
Hind claw only	⅞ths of an inch.
Ditto with toe	1¾ inch.

This bird on dissection proved to be a female, and the stomach contained fragments of small beetles and grit. This is the fourth specimen obtained in Norfolk, all of them having been procured in the neighbourhood of Yarmouth. The three previous examples were all shot on the Dean, between Yarmouth and Caistor; the first on the 22nd of November, 1841, the next in the following April, and the third on the 24th of April, 1843 (see Zool. 181).

Quail.—The appearance of these birds at odd times, when least expected, and above all in such a winter, is very puzzling; one was shot at Yarmouth during the first week in January. Mr. Gurney has also recorded (Zool. S. S. 607) the appearance of six quails, in good condition and quite fresh, in Leadenhall Market, on the 4th of January, all sent from the neighbourhood of Belfast.

HENRY STEVENSON.

Norwich, March 14, 1867.

Ornithological Notes from West Sussex.

By W. JEFFERY, jun., Esq.

(Continued from S. S. 599).

JANUARY, 1867.

Migrations.—Winter setting in in earnest, and so suddenly, too, at the commencement of the new year, caused a very hasty migration on the part of some of our feathered friends. On the morning of the 2nd of January, a fall of snow having hidden the ground during the previous night, a continuous stream of birds was observed passing overhead, consisting principally of sky larks, but also of blackbirds, fieldfares, missel thrushes, song thrushes, redwings and other small birds, occasionally intermixed with peewits and golden plovers. This flight of birds extended on either side for many miles, very probably the whole length of the county. It was noticed on the western border of the county, and as far eastward as Arundel; of the part east of this

I have no knowledge. It was observable principally from day-break up to noon, after which it appeared nearly to cease. The direction of migration was north to south. I have learned that a vast number of these birds congregated in a small island called Thorney Island, situate at the entrance of Chichester Harbour, and having rested there for a time rose high in the air, one immense cloud, and departed south over the water. From other sources I learn that a great flight of golden plover, peewit, and other species, was observed along the coast east of Selsey-Bill moving in a westerly direction. These birds having reached Selsey-Bill appeared to turn off over the water in a course due south, and were thence lost to sight. This was on the 2nd and 3rd of January, though the numbers were far greater on the former day. Being on the coast on the 19th I noticed a migration of small birds, in scattered parties, consisting principally of sky larks, all flying in a westerly direction over the entrance of Chichester Harbour, and thence over Hayling Island. Now this is west of Selsey-Bill; and, in the absence of observations from other parts, it is difficult to arrive at any conclusion as to the route or destination of these migrants. It is remarkable that the course taken is exactly opposite to that pursued by the bulk of our summer visitants in their autumnal migrations (see S. S. 89). If I remember rightly the wind was blowing from the north on the 2nd of January, but I have omitted to make any note on that point.

Wild Fowl.—All agree that, considering the severity of the frost and the continuance of wintry weather, wild fowl have been unusually scarce. A swan (*Cygnus ferus*) was shot by a Bosham gunner in that harbour on the 22nd, out of a flock of seven: this bird I saw next day. A second swan was shot the same day near Havant, I am told out of the same party: this is recorded in the 'Field' of January 26th. Very few brent geese have been killed, and no other species of goose that I am aware of. I have seen one pintail, a male, and two adult male goldeneyes. Females and young birds of this latter species are tolerably common, and are known by the name of "widgeon deevers" (divers). Widgeon (*Anas Penelope*) are the most numerous species, but they even have kept out at sea so much, the wind not being in the right quarter to drive them in, that comparatively few have been killed. Mr. Knox, in his Catalogue of Sussex Birds, considers the scaup duck "the most common species, after the widgeon, that is met with on this coast during the winter months." This, however, I cannot confirm. I have found both pochard and tufted duck far more common; in fact as far as my experience goes the scaup is a scarce winter visitant: perhaps a severe winter is required to bring them. The pochard and tufted duck frequent fresh-water ponds. On the 13th I counted in Aldsworth pond, near Stanstead (West Sussex), about sixty pochards, as well as a pair or two of the tufted duck. I noticed that these latter, as well as some of the pochards, seemed to keep in pairs, male and female, feeding away from the rest. Mergansers (*M. serrator*) have been more numerous than for many years. They are principally females and young males, though I have seen one or two good plumaged males with the green head and perfect crest. One of these which I dissected had in its stomach the remains of an eel that might have measured ten or twelve inches in length when alive,—also a small crab and a few pebbles. In a local paper there is a note of some goosanders having been killed near Petworth.

Kestrel.—A female kestrel, shot on the 19th, had in its stomach the legs and other remains of two small birds, a lark and a linnet (?). Probably the cold weather rendered their capture more easy, and at the same time the regular prey of the kestrel, mice, scarcely ventured out of their holes, and even then perhaps in a tunnel of snow.

Bittern.—On the 23rd I saw a very fine specimen of the bittern, in the flesh, recently killed at Binstead, near Arundel.

Ring Dove.—January 23rd, and two or three days following, flocks of ring doves passed W. to E., in the morning from 8 o'clock till about 10.

W. JEFFERY, JUN.

Ratham, Chichester, February 9, 1867.

Ornithological Notes from the Isle of Wight.

By CAPTAIN HADFIELD.

(Continued from Zool. S. S. 447.)

SEPTEMBER, 1866.

Bluethroated Warbler.—Though authors have hesitated in admitting this species into our Fauna, others have been introduced without a shadow of claim to rank as British, the passenger pigeon for instance. Our list of birds truly requires docking, almost as much as the list of butterflies before it was taken in hand by Mr. Newman. But Sylvia suecica is, I think, now fairly entitled to rank as a British species and a permanent resident, for not only has it been seen at Bonchurch, both summer and winter, but I have now to record its appearance at Shanklin, one having been observed on the 17th near the church: it allowed me to get within a few yards before taking wing and alighting on the trees skirting the rivulet which flows through the village to the Chine. I believe it to have been a male, but as no song was heard I could not be sure, for the old females, according to Temminck, have the breast blue. It is said to frequent low moist places skirting woods, and this I have found to be the case, the Bonchurch birds seldom wandering far from the brook or pond, where one may be generally met with, particularly towards nightfall, among the lower branches of the trees overhanging the stream. To one who has had opportunities of observing the bird and studying its habits, it seems most strange and unaccountable to find one writer calling it a redstart, and another a wagtail! It is most decidedly a robin, and but for the colour not one person in twenty would know the difference. Though a trifle smaller than the redbreast, it is of the same form, and resembles it in its habits, but is more restless and active, and oftener seen knee-deep in the stream splashing the water over-head till the plumage is saturated. Macgillivray says "its song is represented as lively and pleasantly modulated:" it is, to my ear, so like that of the robin that even now I find a difficulty in distinguishing it, nor have I heard of one person noticing the difference, or having an idea of its being other than a redbreast warbling overhead. This similarity in song, manner and habits, may prove its security, and save it from the fate of other rare migrants and wanderers.

Swallow.—September 19th. Seen in great numbers hawking over the Downs: they were mostly birds of the season, the tails being but slightly forked. 27th. Numbers of swallows and a few martins observed this morning about Shanklin and Sandown, but the gathering has been for some time noticed, and commenced about the usual period, namely, the beginning of September. The congregating, if not migrating, of the young birds before the old, I have already recorded and remarked on.

Pied Wagtail.—September 21st. A considerable flock observed at Bonchurch flying to the eastward.

Meadow Pipit.—A large flock seen to-day about the cliffs at Luccombe.

Wood Wren.—September 23rd. Several seen in the garden, mostly birds of the season; the plumage but faintly shaded with yellow.

Spotted Flycatcher.—September 23rd. One was seen to-day taking a bath in the road-side brook.

Woodcock.—September 25th. A woodcock was observed to alight by the brook near the cliffs at Steephill; on being flushed by the farmer's men it took a long flight in a northerly direction. It being rather early for the migratory flight, this bird may possibly have passed the summer with us, the woodcock occasionally breeding in the Island: I once saw a nest of young that had been taken, together with the old bird, in a wood near Yarmouth.

OCTOBER.

Green Linnet.—October 1st. A flock of green linnets observed this morning passing over the town in an easterly direction; the yellowness of the plumage leads me to believe they were all males. This species is not nearly so common here as in the north—Morayshire, for instance, where it was found most abundant and familiar.

Swallow, &c.—5th. Thermometer 48° at 9 A.M., having fallen 12° since yesterday. This sudden change of temperature is causing a general migratory move, thousands of swallows and martins, in about equal numbers, having been observed to-day, from an early hour, in rapid flight to the eastward, against the wind, which is bringing up both fog and rain. Their migratory flight is generally opposed to the wind, which is readily accounted for: having gradually approached the south coast during the latter days of September, they linger in our sheltered glades and vales, roosting on the ledges and in the clefts and crevices of the shelving inland cliffs, till change of temperature warns them to depart; they then have to make their way to the eastward against an adverse wind till reaching the point of departure—probably somewhere between Dunnose and Beachy Head. Accompanying the swallows, and intermixed with them, several species of small birds were noticed, but owing to the fog and rapidity of flight few were identified: a hawk, being among them, probably accelerated their flight. 6th. On my way to Niton, at eight o'clock A.M., I observed numbers of swallows and martins in circular flight above the cliffs: they had collected about a flock of sheep, which they were encircling in rapid flight, to hawk the flies. They were constantly passing and repassing, in the same order, and though the stragglers might here and there be seen darting forth, they would speedily rejoin the main body, and whirl away as before. The gathering extended the whole length of the Undercliff, and they were to be seen in countless numbers.

In my last year's notes these cliffs were referred to as the roosting resort of both swallow and martin during the autumn, when trees no longer afford sufficient shelter or cover: I also remarked on the Undercliff being the general rendezvous of both species, and what has been lately observed confirms me in the opinion,—the young birds congregating, if not migrating, early in September; the adults towards the latter end of the month and beginning of October, when they take their final departure, always excepting late broods, some of which remain with us, as already recorded, till November, and occasionally till the first week in December. 10th. Scarcely a swallow or martin is to be seen, where such numbers were observed on the 6th. That the main body has now migrated there can be no doubt. Though the wind is east and the nights are cold the thermometer, on the 7th at 3 P.M., was 65°, but on the following day had fallen 10°. 31st. There are still some young swallows about, but I have seen no martins for a day or two.

Wild Fowl.—Wild ducks have been occasionally observed off the coast, the first flock seen the end of September, which, being unusually early, is thought to foretell a severe winter. Widgeon were also noticed about the same period, in the Brading Marshes.

Peregrine Falcon.—In the May notes I expressed a doubt as to the peregrine's breeding in the Culver Cliffs of late, but have since ascertained that a pair bred there this season; the nest, being placed beneath a bold jutting point, was inaccessible. Till within the last ten years a pair of peregrines bred in the cliffs near Niton, but they were cruelly shot.

Gray Phalarope.—Having heard, early in the month, that some strange birds like sandpipers had been shot in our Bay and forwarded to Newport for preservation, I wrote to inquire what they might be, but receiving no answer concluded they were some common Tringa, till undeceived by Police-Sergeant Rossiter, an intelligent observer, to whom I have more than once been indebted for information: he had seen specimens both here and in Newport, and that they were the gray phalarope there could be no longer a doubt. I have since heard from Mr. Smith that he has received nineteen phalaropes during September and the early part of October, but none were observed in this neighbourhood till the beginning of this month, and then but a small flock or two. Their appearance caused quite a sensation among the beach-men and boys, and two were stoned by the latter, so tame and fearless were they at first, and a few have been shot on the sands within the harbour. When disturbed or driven from the shore they would alight on the water; but in the course of a few days became more wary, and were approached with difficulty. Macgillivray says they are of the size of the purple sandpiper; he might have added that they are alike in habits, the latter species being equally familiar: no Tringa, except those of North America, have I found so unwary. Two specimens only of the phalarope have come under my observation, and both had been skinned and set up. One is a full-sized adult, in winter plumage, as described by Temminck, the whole of the under parts from chin to vent white. The other is smaller, and evidently a bird of the season in a transition state of plumage: forehead white; crown of the head longitudinally streaked with black, white and reddish brown; neck white, but the lower part of a decided rufous tinge; breast and belly white, mottled with gray and clove-brown; bill dusky, one inch in length, narrow, but towards the point, which is decurved, expands to a two-fold width, having somewhat the appearance of a spoonbill. There is a white band over the eye to the nape, and a black one beneath; nape black; back of a bluish gray, but the feathers are streaked with black near the shafts. Primaries black, with white shafts; secondaries dusky, but very broadly margined with reddish brown, except the inner one, which has that part of a pure white. Tail rather long, *viz.* 2¾ inches; feathers acute, the centre ones, which are the longest, black, margined with reddish brown; the rest are of a dusky brown, except the exterior ones, which are light grayish brown, margined with white. Scapulars black, edged with reddish brown. Macgillivray says, "tail small;" Temminck, "queue longue," which it is, for a water bird's. Under tail-coverts very elongated, exceeding the tail by a quarter of an inch; they are white, except towards the points, which have a reddish tinge. The wings when closed slightly exceed the tail. Tarsus and toes of a light brown, slender; nails black, and very small; back toe elevated. Feet partly webbed, and toes lobed, as represented in Bewick's wood-cut; but Pennant's are of double the natural size. The birds were in poor condition. The phalarope being a rare species with us, I have described the plumage of the immature bird at some length.

NOVEMBER.

Land Rail.—8th. Sprung a land rail to-day when shooting in a turnip-field on Niton farm; the mildness of the season may account for its late stay.

Stonechat, &c.—A white stonechat, but with black quills and tail-feathers, was shot near Newport during the month of October; also a white robin: the latter is wholly of a dull white, and is evidently a bird of the season. I have also lately seen another pied blackbird, which is perhaps more subject to these variations of plumage than any other species. In a former note on a pied blackbird I expressed my belief that the white would gradually disappear, and subsequent observation verified my conjecture, confirming that of Buffon, too, with regard to white swallows; but I observe that a writer in the 'Zoologist' (S. S. 454) holds a contrary opinion, saying that "white feathers caused by disease will assume the true colours, but natural white feathers never change." Again, "real albinos invariably remain white." If so, they must be barren, or albino and pied individuals would be more numerous. Disease or wound may possibly turn black feathers white, as they cause the hair of animals to turn gray, but the plumage of the pied birds that have come under my observation could not have been thus transformed, as I have found it regularly and evenly marked; for instance, that of this stonechat is entirely white, with the exception of the quills and tail-feathers, which are black. The pied blackbird's wings were both similarly marked, and the tail-feathers equally spotted or barred. If albinos—the swallow, for instance—permanently retain the white colour, is it not strange that a close observer of the swallow tribe should never have seen but *one* white swallow in thirty years? As a rule, we shall I believe find that Nature resumes her course or sway; were it not so we should be meeting with monstrosities at every turn.

Redwing.—First seen on the 14th. On the 20th a very large flock was observed flying over the Downs in a north-westerly direction; they passed overhead, almost within gun-shot. A constant chattering or call-note was heard as they performed their aërial evolutions, at one time flying in open order, at another with closed ranks, and occasionally in divisions. When first seen they must have been some six or seven hundred feet above the level of the sea, but on reaching the Downs they suddenly dropped, as if about to alight.

Water Rail.—Having heard, early in the month, that a reeve had been killed by a cat on the cliffs, two miles from here, I walked over to see the bird, which proved to be a handsome male water rail, a rare species in the Undercliff.

Hoopoe.—A handsome bird of this species was killed at Blackgang, near Niton, early in October.

Swallow.—19th. When passing through the village of Carisbrooke to-day, I observed a swallow flying about the church tower, in which it doubtless roosts: though this is the last I have seen, two or three were observed in this neighbourhood on the 22nd. As to the supposed occurrence of the American barn swallow in England (Zool. S. S. 480), I cannot but think, with Mr. Newman, that it "requires further investigation," but it need not entail the destruction of swallow-life anticipated, for though the American species, in form and flight, is very similar to our chimney swallow, it differs from it in size and colour. The former is smaller, and has the chin, neck and upper part of the breast of a deep bright chestnut, not "light chestnut," as stated by Mr. Harting. Though Wilson says (vol. ii. page 48) that the belly is of a "light chestnut," at page 43, we are told that it is of a "bright chestnut," and the belly of a specimen before me, though somewhat faded, having been shot some years ago in Canada, is still of a brightish chestnut, but many shades lighter than the breast. Mr. Harting remarks, "I have several times seen a bird which I take to be the barn swallow of America, and which I believe is not uncommon in England." I know the species well, but have never met with it in Great Britain, and I trust no ornithologist will, by a wholesale slaughter, attempt to procure a specimen. Independent of size, so different do they appear in colour when seen from beneath, the least observant could hardly fail to distinguish them at a moderate distance.

Gray Phalarope.—It would appear, from what I have lately heard, that an immense flight of these rare birds passed over the island during the night of the 16th of September, their cry or call-note having been heard by several of the inhabitants of Newport and the vicinity. Those subsequently found along our shores and on the inland pools and ponds were doubtless stragglers from the main body; too weak or exhausted to continue on their migratory course, for they were found easy of approach and were readily shot, and I am informed that they were both lean and empty.

Blackbreasted Tern.—A beautiful specimen of this elegant little species was shown me lately, having been shot late in the spring at Newtown. It measures about 9¼ inches in length, and the wing from flexure 8¾. The tail is but slightly forked, the feathers regularly and gradually increasing step by step. The head, neck and under parts black, as well as the breast.

Little Auk.—I have lately seen a well-prepared specimen of this scarce, not to say rare, species: it was shot on our shore about two years since, by a tradesmen of the place.

DECEMBER.

Land Rail.—1st. When partridge-shooting to-day, on Niton farm, a land rail rose from the same field of turnips, on the hill-side, where one was found on the 8th of November. As frosty nights and cutting cold winds have not yet caused it to migrate, it may possibly remain through the winter. 29th. It was again found among the turnips. Though I have endeavoured to protect it, it was shot on the 31st by a brother-sportsman, who assures me that he has also met with it in the winter in Ireland.

Gray Phalarope.—4th. A few of these birds still linger on our shores, possibly too weak to resume their southern migration: two were observed this morning cowering under a rock, to shelter themselves from the storm of wind and rain.

Kittiwake.—10th. Five or six kittiwakes were shot off Shanklin, and many more were seen. It being so common a species with us during the winter, the remark of Macgillivray, "Kittiwakes arrive along our coasts in the end of April, and disappear in October," could have had no reference to the channel coast. Two black scoters were observed: though occasionally met with it is not a common species on this coast.

Common Gull.—Large flocks have been seen of late in different parts of the island, frequenting the ploughed lands: two shot on the 10th proved to be birds of the season, in the transition state of plumage, as described by Temminck, after the autumnal moult; their beaks were black.

Gannet.—First observed on this coast on the 13th of the month. On the 28th I saw a dozen or more fishing off Dunnose, their headlong plunges sending the spray some feet into the air. A black scoter, nearer shore, was taking its evening repast, but how different its manner of diving, seemingly sinking without effort and leaving no trace behind.

Redthroated Diver.—Though not seen in such numbers this winter as the last, they are generally to be met with from sunrise to about noon, in Sandown Bay, their usual resort, and I have heard of several being shot. They are principally killed for the sake of the skins. Guillemots and razorbills frequently seen in the bay.

Rook.—14th. Rooks were observed this morning in considerable numbers in their nesting-trees, attracted no doubt by the mildness of the weather, the thermometer having been up to 53° during the month, and that too at an early hour.

Yellow Wagtail.—17th. This species has been again observed.

Jackdaw.—There is a pied jackdaw in the Land-slip Cliffs, a bird of the season I have reason to believe, or it must have been before observed. In having the secondary quills and coverts white it greatly resembles the magpie.

Fieldfare.—22nd. Though a flock was observed to-day, comparatively few have been seen this season, there having been no cold to drive them so far south. Owing to the absence of either snow or severe frost, thrushes have escaped the usual Christmas slaughter, and may be daily heard pouring forth their joyful notes. Our thrushes, owing to the late mild winters, are decidedly on the increase. The blackbird, though as prolific a species as the thrush, is not nearly so numerous; its black plumage, being more conspicuous, renders it more liable to attack from its deadly enemy the sparrow-hawk.

JANUARY, 1867.

Sky Lark.—On the 2nd and 3rd this neighbourhood was visited by great flights of larks, doubtless driven southward by the heavy fall of snow in the northern counties: even here the ground, for the most part, was covered with snow, and the thermometer, at 9 A.M. on the 3rd, was at 25°. Many of the birds were in a very exhausted state; one I observed in the garden feeding on the leaf of a broccoli; another was lying with outstretched wings on the ground. Intermixed with them were many titlarks.

Partridge.—Though a strong and hardy bird, the severe winter is beginning to tell on them; and they now feed chiefly, if not wholly, on the grass and turnip-leaves that are still above the snow. The gizzard of one shot on the 19th contained but a small quantity of coarse grass, but the cœca, &c., were crammed with a green pulpy mass, more or less digested, which I took to be turnip-leaf. No grain of any kind being now procurable necessitates their cramming themselves with less nutritious food. Though now wild and wary, they will at times allow a small dog to chase them in a turnip-field before taking wing. The plumage of a splendid old male lately shot was of a beautiful light gray on the throat, neck and upper part of the breast. Macgillivray says that the partridge lays from ten to fifteen eggs;

Temminck that they have from twelve to twenty, which I need hardly say is more correct. Numbers of small stones, both round and angular, were found in the gizzard, the largest about two-tenths of an inch in length. They vary too in colour, red, yellow, brown and white; some of the latter are transparent. I notice the colour, as Macgillivray tells us that they use "particles of *white* quartz."

Thrush, &c.—Christmas having passed I was inclined to hope that our thrushes had escaped, but with the new year their troubles began, and for a week or ten days a war of extermination was carried on, and so feeble had they become that they were readily shot and stoned by the least expert. Scores of men and boys turned out, and hundreds of thrushes and redwings were slaughtered. On the 17th I observed several endeavouring to obtain food on a sheltered bank, where the snow had been partially thawed; they had managed to make a hole in the ground, and the near report of a gun caused but a momentary cessation of their labours. Though haws and other berries were abundant, the trees and bushes had been stripped by the second week in January. But the song thrush, in hard weather, more generally seeks its food on the sea-cliffs and shore. Even the titlark, a more hardy bird, has been driven to search for food about our houses, and I saw one following a cart loaded with earth, on which it alighted, regardless of both horse and man.

Shoveller.—A female of this rare species was shot in Brading Harbour on the 21st, and sold as a widgeon. The pochard, too, in this neighbourhood goes by the name of widgeon. Never having met with the shoveller before, I referred both to Temminck and Macgillivray, but their descriptions of the female do not agree, nor do they exactly correspond with my specimen: the former saying "La femelle a la tête d'un roux très clair;" whereas my bird has the crown of the head black, the feathers margined with reddish-brown. Macgillivray says, "On the middle of the breast inclining to white;" but of this, I see no traces. The feathers of the breast are dark brown, broadly margined and tipped with light reddish brown, those of the belly marked the same, but some shades lighter; under tail-coverts, which are very elongated, dark brown, very broadly margined and tipped with red and yellowish white. Its general appearance and colour is not unlike that of the common wild duck. Though of full size it is very thin, and weighs but about twelve ounces. The stomach contained nothing but small pebbles, mostly rounded, apparently sea-shore shingle, the largest about three-tenths of an inch in length by two-tenths in breadth. In the œsophagus were found some rather large pieces of the stem or root of sea-weed.

Stock Dove, &c.—24th. One seen, but the stock dove is not often observed in this neighbourhood. A wood pigeon shot to-day was very emaciated; the crop contained but a small quantity of turnip-leaf, and the gizzard was quite empty.

Tufted Duck.—21st. A female of this species was shot near Brading: it measures 15¾ inches in length, and 28 inches in extent of wings. Bill along the ridge one inch and six-tenths, and nine-tenths of an inch wide. Though full-grown it is a young bird, there being still traces of the white patch each side the bill, but no appearance whatever of the triangular white patch on the chin, spoken of by Macgillivray, but not mentioned by Temminck, whose description of the young Macgillivray quotes. As there is some appearance of crest, the bird must, according to Temminck, have undergone the first moult.

FEBRUARY.

Starling.—On the 13th found an immense flock of starlings in the marshes: on being disturbed they alighted in the trees and commenced their low monotonous song, which, though somewhat similar to the winter song of the redwing, is very unlike that of the song thrush, to which Macgillivray also compares it, though he says it "does not equal it." Their merry chattering song—if song it may be called—is so like that of the cow bunting that I could have fancied myself in a Canadian wood. I consider Macgillivray wrong in saying that the flesh of the starling "is not much inferior to that of the thrush, and not at all inferior to the flesh of the wild pigeon," but *chacun a son gout.* Wilson says of its cousin, the red-winged starling, "The flesh is little esteemed, being black, dry and tough;" if we add bitter the description would answer for that of our starling. Some years ago, in an unpublished note, I remarked on the flight of the starling being somewhat similar to that of the swallow and martin; I am pleased to find (Zool. S. S., 594) a correspondent indirectly corroborating my statement: he says, "I observed several starlings circling round and round, after the manner of house martins, and, like them too, occasionally rising a little in their flight. * * * When passing at a lower level I was convinced of their identity, although the total absence of martins at the time left no ground for doubt." He remarks on the "exact similarity of their movements to those of house martins." My object in pointing this out was to account for the supposed occurrence of the swallow in winter. Though the starling is unlike both martin and swallow when handled, except in the shape of the wing when seen at a distance, and where but a momentary view is obtained, the resemblance is very striking.

Partridge.—On the 13th partridges were first observed in pairs. Last year they were not found paired till the 1st of March.

Rook.—Rooks had returned to their nesting-trees by the beginning of the month, about the usual time. A writer in the 'Field' says that the rook does not repair the old nest, but invariably rebuilds: he endeavours to prove this by saying that he has observed them removing the sticks of the old nest one by one. I have noticed the same thing, but the birds found so engaged have not been the rightful owners of the nest.

Redthroated Diver.—One was shot on the 20th. Though many have been observed, comparatively few have been killed this winter, the weather having proved too boisterous for boating on this bold coast.

MARCH.

Peewit.—2nd. An immense flight of peewits observed in the Sandown Marshes, which have been much flooded by the late rains: they have been doubtless driven southward by the severity of the weather. Even in a mild winter few remain in the north; for instance, in 1858-59 they were rarely met with in Morayshire.

Thrush.—19th. Heard of a nest being found containing eggs.

Redstart.—21st. A female redstart observed in the garden, though the ground was covered with snow, and the thermometer 33° only at 9 A.M.

Chiffchaff.—23rd. Two observed at Bonchurch.

Rook.—23rd. Some pairs, probably the younger birds, are later in building than the rest; for instance, a nest was begun to-day, for I saw the first stick laid most carefully, both birds being present on the occasion. 31st. The nest is apparently more than half finished.

Robin, &c.—24th. A robin's nest found. The wren has also commenced building.

Willow Wren.—31st. First seen.

HENRY HADFIELD.

Ventnor, Isle of Wight, April 11, 1867.

An Inquiry into the Nature and Properties of the Swallow-stone and Swallow's-herb. By JAMES EDMUND HARTING, Esq., F Z.S.

BETWEEN the so-called "swallow-stone" and the plant named "swallow's-herb" there is this remarkable connection, that both were considered to be sovereign remedies for all diseases of the eye. An inquiry into the history of each of these productions leads to some curious information.

Your correspondent Dr. Lebour informs us that an examination of some swallow-stones showed them to be the hard polished calcareous opercula of some species of Turbo, but that their worn state precluded an identification of the species. He adds that their peculiar shape, one side being flat and the other convex, admits of their being pushed under the eyelid, across the eyeball, and thus they remove any eyelash or other foreign substance which may have got in the eye; but that further than this they have no curing power.

The popular belief on this subject, current amongst the peasants in Brittany, is no doubt of some antiquity, and the allusion which Longfellow has made to it in his beautiful poem of 'Evangeline' would seem to confirm this impression, inasmuch as we may assume that the legend found its way into Acadia through the French colonists, who were the first to settle there. There is this noticeable difference, however, between the current opinion in Brittany and the popular belief in Acadie, as expressed by Longfellow, namely, that in the former case it is the *finder* of the stone in the swallow's nest who is benefited; in the latter it is the sight of the "*fledglings*" that is thereby restored.

On referring to ancient authors we are struck with a remark which is variously expressed, to the effect that the swallow, for a similar purpose, makes use of a plant named Chelidonium.

This plant is the well-known Celandine (*Chelidonium majus*).* It belongs to the Papaveraceæ, or poppies, and may be found growing, in waste places, to the height of about two feet. It is brittle, slightly hairy and full of a yellow fœtid juice, and bears small yellow flowers in long-stalked umbels.

The name Chelidonium is undoubtedly derived from the Greek χελιδὼν, a swallow, but the reason for its being thus named is not so obvious. Some authors suggest that it was so called on account of its flowering about the time of the arrival of the swallow, while others assert that it derives its appellation from being the plant medicinally made use of by that bird.

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* Hooker and Arnott's 'British Flora,' p. 18.

The belief that animals and birds possess a knowledge of certain plants which will cure a disease, or benefit them in some way, is very ancient, and this particular plant is alluded to by old authors as being especially selected for the purpose. Pliny observes (Hist. Nat. fol. 1530, p. 461, xv.) "Animalia quoque invenire herbas, *inprimisque chelidoniam.* Hac enim hirundines oculis pullorum in nido restituunt visum, ut quidam volunt, etiam erutis oculis" (!) And the same author further remarks, "Chelidoniam visui saluberrimam hirundines monstravere vexatis pullorum oculis illa medentes."

Gerard, referring to this plant, in his 'Herball, or Generall Historie of Plantes' (1597), observes:—"It is called Celandine, not because it then first springeth at the comming in of the swallowes, or dieth when they goe away: for as we haue saide, it may be founde all the yeere; but because some hold opinion that with this herbe the dams restore sight to their young ones when their eies be out, the which things are vaine and false: for Cornelius Celsus in his sixt booke doth witnesse that when the sight of the eies of diuers yoong birdes be put foorth by some outward meanes, it will after a time be restored of itselfe, and soonest of all the sight of the swallow, whereupon (as the same saith) that the tale or fable grew, how, thorow an herbe the dams restore that thing, which healeth of itselfe: the very same doth Aristotle alleadge in the sixt book of the historie of liuing creatures: the eies of young swallowes, saith he, that are not fledge, if a man do pricke them out, do grow againe, and afterwards do perfectly recouer their sight." Subsequently, when speaking of the "virtues" of the plant, the sage Gerard continues: "The iuice of the herbe is good to sharpen the sight, for it cleanseth and consumeth awaie slimie things that cleaue about the ball of the eie, and hinder the sight." The root was considered good for yellow jaundice, and also (being chewed) for toothache. Gerard adds "The roote cut in small peeces is good to be giuen vnto hawkes against sundrie diseases:" and Turbervile, in his 'Booke of Falconrie' (1611), treats of a cure for "a blow giuen to the eye, or of some other mischance," as follows: "Sometimes the eyes of hawkes are hurt by some mishappe, some stripe, or otherwise as I said afore. Against such unlooked for mischances, Master Malopin, in his boke of the Prince, willeth to take the juice of Celondine, otherwise Arondell, or Swallowes hearbe, and to convey it into the eye. And if it bee not to be had greene, to take it drie, and to beat it into powder, and to blow it into her eye with a quill, and this shall recure the hawke."

A marginal note to this paragraph informs us that "Arondell"[*] in French is "Hirundo," a swallow, otherwise called "Chelidon."

Parkinson, in his 'Theatrum Botanicum' (1640), alludes to two species of Celandine, C. major and C. minor, and says:—"Some call them Chelidonia major and minor, and tooke the name, as Dioscorides saith, because it springeth when swallowes come in; and withered at their going away (which is true in neither, the greater whereof Dioscorides chiefely speaketh, being greene both winter and sommer; and the lesser springeth before swallowes come in, and is gone and withered long before their departure). Dioscorides likewise, and Pliny also, say it tooke that name from swallowes that cured their young ones' eyes, that were hurt, with bringing this herbe and putting it to them: but Aristotle, and Celsus from him, doe shew that the young ones of partridges, doves, swallowes, &c., will recover their sight, (being hurt) of themselves in time, without anything applyed unto them, and therefore Celsus accounteth this saying but a fable."

It is curious to observe how universally this plant appears to be associated with the swallow. We are told that Chelidonium major is "Celidonia maggiore" of the Italians, "Yerva de las golondrinhas" of the Spaniards, "Chelidoine Felongue" and "Esclaire" of the French, and "Schwalbenkraut" of the Germans; while we, in English, call it "Celandine," "Swallow's herb" and "Swallow-wort."

To revert to the "Swallow-*stone*." The connection between the herb and stone is this, that both were brought to the nest by the bird, and both were deemed good for the eyes.

The above-mentioned authors make no mention of the "stone;" that is to say, no mention of it with special reference to its curing diseases of the eye, nor indeed to its being brought to the nest by the parent bird.[†] A friend has suggested that the tradition may have originated with the Chinese, to whom the edible swallows nests have been so long known, and to whom credit is now given for having been, centuries ago, acquainted with inventions which, until recently, were considered to be modern. It may be so; but, not being acquainted with Chinese, I am unable to say whether there is, in that language, an equivalent for "swallow-stone," or "swallow's herb," or whether ancient Chinese authors in any way throw light upon the subject.

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[*] "Arondell," no doubt the old French, or a corruption of "Hirondelle."

[†] I have not overlooked the following passage in Pliny, but it is not quite to the point:—"Avibus venter carnosus callosusque. In ventre hirundinum pullis *lapilli* candido aut rubenti colore, qui chelidonii vocantur, magicis narrati artibus reperiuntur." Elsewhere the same author goes further than would be expected, and informs us that swallows themselves may be used medicinally:—"Auxiliatur contra serpentes et columbarum caro recem concerpta, et hirundinum."

J. E. HARTING.

Kingsbury, Middlesex.
April, 1867.

NOTICES OF NEW BOOKS.

'*The Birds of Norfolk, with Remarks on their Habits, Migration and Local Distribution.*' By HENRY STEVENSON, F.L.S. In Two Volumes. Vol. 1. London: Van Voorst, Paternoster Row. Norwich: Matchett and Stevenson. 1866. 446 pp. Demy 8vo. 2 litho. plates, drawn by Wolf. Price ten shillings and sixpence.

THERE are three reasons why this book should be especially acceptable to the readers of the 'Zoologist,' as the acknowledged organ of British ornithologists: 1. In the pages of that journal appeared the first really complete and digested list of the Birds of Norfolk; so that the subject seems peculiarly its own. 2. Mr. Stevenson, with unwearying assiduity, has continued the theme in these pages up to the present time. 3. The work is one of those masterly contributions to British Ornithology which it is the peculiar province of the 'Zoologist' to introduce to every one of its readers as an essential addition to his library.

It is impossible to open the volume at any page without being made aware how extensive have been the author's researches into the labours of his predecessors, and how admirably he has filled in such *lacunæ* as necessarily occur, with observations of his own. But a higher meed of praise than this is due to Mr. Stevenson for the candour and openness with which, in every instance, he has acknowledged the sources whence he has obtained information. I well recollect that when I first published my 'British Ferns' an eminent botanist, alluding to the constantly recurring acknowledgment of the sources of information, told me "he thought such excessive conscientiousness was quite superfluous:" this opinion is very common, and some conceal their conscientiousness so entirely that one fails to discover its existence, and perhaps may rush to the conclusion that it is totally absent. Mr. Stevenson is almost the only writer who carries this conscientiousness to a sufficient extent; indeed to an extent thoroughly and scrupulously honest, and with this alone can I ever feel perfectly satisfied. Wherever we find in a book continued proofs of this honesty of purpose it seems impossible to avoid forming a favourable impression both of the author and of his labours.

It seems unnecessary here to say anything of the physical characters and agricultural changes so constantly going on in Norfolk, since these have been so admirably treated in these pages by Messrs. Gurney and Fisher; sufficient to say that the area of fen land is constantly on the decrease, owing to the extensive system of drainage now carried on, and for the same reason the area of arable land and fir-plantation is constantly on the increase. From the same causes the number of aquatic and wading birds are decreasing, while arboreal species are slightly on the increase. We have an apt illustration of this in the longeared owl.

Longeared Owl.—"The longeared owl is another instance of the changes which have taken place in a few years, from local causes, in the habits of some of our feathered visitants. Whilst drainage and the plough are fast driving the harriers and other marsh breeders from their accustomed haunts, the rapid increase in our fir-plantations, especially near the coast, affords such inducements to this species to remain and breed with us, that the autumn visitant of a few years since, only occasionally known to stay through the summer, may now be more properly termed a numerous resident, receiving additions to its numbers in autumn. The Rev. R. Lubbock, writing of this owl some twenty years ago, though mentioning the fact of its sometimes remaining to breed, says, 'The bird may be considered altogether rare,' which statement is in strange contrast to the number of specimens now, at all seasons of the year, brought to be preserved in this city (particularly the case in 1854), and but for the thoughtless persecution of keepers and collectors, a pair or more might be found located in almost any of our woods or plantations of sufficient extent. In the spring of 1856 no less than ten young birds were taken in a plantation at Sprowston, near Norwich, and several old ones were shot; yet since that date a few pairs have still continued to frequent the same locality, and they are more particularly plentiful in the extensive fir-coverts in the vicinity of our east coast. In the western and south-western parts of the county they are also very plentiful."—p. 44.

The occurrence of a second specimen of Strix asio is too interesting to be omitted here: the only previous notice of the species will be found in the 'Naturalist' for August, 1855: it is cited in the preface to Mr. Yarrell's third edition, at p. vi., and again in my edition of Montagu, at p. 221:—

Scops asio.—"Mr. Gurney informs me that some years back he purchased from the late Mr. Thurtell, then a nurseryman at Eaton (when selling off his collection of Norfolk birds), an adult specimen of this rare owl, said to have been killed near Yarmouth, but till then supposed to be only an European scops owl."—p. 44.

The barn owl, that true friend of the farmer and gardener, comes in for a good word at the hands of our observant author:—

Barn Owl.—"What a pleasure it is in an autumnal evening, when returning at sunset after a long day's sport, to watch this owl on noiseless wings flitting about the homestead. Now skimming along the fences in search of prey, now rapidly turning the corner of the stack-yard, it suddenly seizes upon some luckless victim, and is off in an instant to its roost in the tower, or disappears for a time through the little opening in the gable end of the barn. Its wild screech uttered in the 'stilly night' is certainly somewhat startling to the nerves, and, heard amidst the ruins of some crumbling cloisters, may well scare the listener, unaccustomed to the sound; yet scarcely would one wish the rustic mind altogether disabused of its old superstitions, if the association of this owl with 'uncanny things' might aid in preserving it from unreasoning persecution. I would rather that every thoughtless clod, who compassed the death of either old or young, might share the horrors of that luckless wight who, having killed the church owl as it flitted past him, ran shrieking home, and, with his hair on end, confessed his awful crime, 'I've been and shot a cherubim.'"—p. 52.

The theory I have propounded elsewhere, of the existence of pairs of species scarcely distinguishable from each other, receives some little illustration from Mr. Stevenson's very interesting notes on the common dipper and bluethroated warbler, species which have long been subjects of discussion among technical ornithologists: these notes will I think be read with pleasure and profit, but I do not presume to offer any opinion on points that have proved so difficult of solution.

Common Dipper.—"Whether or not the blackbreasted water ouzel, the Cinclus melanogaster of Gould's 'Birds of Europe,' is specifically distinct from the ordinary British form, with a chestnut band across the abdomen, or merely a climatal variety, undoubtedly our Norfolk specimens belong to the former type. I have at different times examined six or seven examples, all killed in this county, which, with one exception to be hereafter mentioned, exhibited no trace of chestnut on the under parts, but were identical with a Lapland specimen in the Norwich Museum (No. 40, *b*), collected in that country by the late Mr. Wolley. We may naturally suppose, therefore, from this circumstance, and the season at which our few Norfolk specimens invariably appear, that they are chance stragglers from the Scandinavian peninsula; and that this opinion is entertained also by Mr. Gould, to whom I communicated the above particulars for his new work on 'The Birds of Great Britain,' is shown by his concluding remark, 'I can account for their occurrence in no other way.'"—p. 69.

Bluethroated Warbler.—"It is particularly worthy of note that both these birds, as well as the first recorded British specimen now in the Museum at Newcastle-on-Tyne, belong to the form with the red spot prevailing in Scandinavia, and not to the white-spotted form which yearly visits Germany and Holland. Of these two the Lowestoft specimen is the most perfect in plumage, both as to the extent and vividness of the blue, and the purity of the red spot, the same parts in the Yarmouth bird being less clearly defined. How far the white or red spots may be considered as characteristics of two distinct species it is difficult to say; it will suffice, however, for my present purpose, to have shown that the only two examples met with on our eastern coast are, like the dippers before alluded to, identical with Lapland specimens, presented to the Norwich Museum by the late Mr. Wolley, and are represented by the two figures in Dr. Bree's 'Birds of Europe' (vol. ii. p. 11). Having adopted the nomenclature of Yarrell in this work, I have retained his scientific designation of Phœnicura suecica, the specific term 'suecica' being perfectly applicable in the present instance, although not correctly so to the white-spotted form, figured by that author in his 'British Birds.' There is no doubt that the red-spotted form is the true Motacilla suecica of Linnæus, subsequently described by Pallas as M. cærulecula, and by Schlegel as Lusciola cyanecula orientalis; whilst the white-spotted form, which does not seem to extend its range so far northward, is the S. cyanecula of Meyer and Schintz, improperly called Cyanecula suecica by Brehm and others. Another, and apparently less common form of bluethroated warbler, having the entire throat blue, without either a red or a white spot, has received the name of Sylvia Wolfii. Mr. Newcome's collection at Feltwell, contains an example of this form which was killed in Holland."—p. 96.

The nesting of the ring ouzel in our eastern counties has been frequently doubted, and it cannot be denied that the extreme similarity —might I not say the exact similarity—of the eggs exhibited as ring ouzel's to those of the blackbird, may be accepted as an apology sufficient for any amount of scepticism. Still I hold it unwise to volunteer an opinion, seeing no argument of mine can alter facts, and that facts must reveal themselves in course of time, if patiently sought for. In the mean time let us hear Mr. Stevenson on the subject, but constantly bearing in mind the fact that he gives his authorities without venturing to endorse their assertions.

Ring Ouzel.—"The ring ouzel has been known occasionally to nest in this county, and although probably overlooked, from its general resemblance to the common blackbird and the similarity in the eggs of the two species, it is not improbable that a few pairs may do so nearly every year in favourable districts, and I have reason to believe that such is the case at Holkham. Mr. Spalding, of Westleton, who has paid much attention to their habits in Suffolk, assures me that he has himself taken several nests and eggs in his neighbourhood, where they remain till late in May, should the winds be contrary, and then frequently nest and lay; but he has never known the young to be hatched, as the old birds appear at once with the first favourable wind for more northern localities. They build on the stubs in low damp cars, both at Westleton and Yoxford, where the birds have been watched, and would appear to remain in all cases at no great distance from the coast. About thirty years ago a nest of this species, with the old bird sitting upon it, was found by Mr. Rising in his garden at Horsey."—p. 85.

I have been much interested in the following observations on the gold-crest, a bird I have been so accustomed to see in pairs, or at most in threes, that so large a congregation seems almost miraculous: on this and all other questions brought before the readers of this notice I shall feel extremely obliged for the observations of any readers whose experience is more extended than my own. Although no one for a moment will doubt the facts recorded by Mr. Stevenson from personal observation, still it is peculiarly gratifying to meet with collateral and independent evidence.

Goldencrested Wren.—"As I was walking to Hemsby, about 7.30, when it was just daylight, about half a mile out of Yarmouth, on the Caister road, my attention was attracted to a small bush overhanging the marsh dyke which borders the pathway, by the continuous twittering of a small bird. On looking closely I found the bush, small as it was, literally covered with goldencrested wrens. There was hardly an inch of twig that had not a bird on it, and even from my rough attempt at calculation at the time, I feel sure there were at least two or three hundred. Most of them were either females or young birds, having a lemon-coloured crest; they were perfectly tame, and although I sat down on the other side of the ditch, within six feet, and watched them for some time, they did not attempt to fly away, but one or more would occasionally rise off its perch, and hover like a butterfly, and settle again in some other position. I went the next morning to look for them, but they were all gone. The wind had been easterly, with much fog."—p. 136.

In this country we know little or nothing of the waxwing in confinement, and are always glad to learn any particulars of so rare a captive. Mr. Stevenson was fortunate in purchasing a pair from Mr. Jamrach, the animal dealer in Ratcliff Highway. The female died apparently in moult, but the male, with great attention to cleanliness and diet, assumed his perfect plumage in January, and was as handsome as any wild specimen Mr. Stevenson has ever seen. As so little is known of the waxwing as a cage bird, it cannot be otherwise than acceptable to know the treatment which proved so successful, as well as the habits of a bird previously unknown as a captive.

Waxwing.—"I found bread and egg, with a little hemp seed, the best diet, with berries such as privet and ivy occasionally; and latterly I obtained some of the preserved cranberries, which at that time were much sold by the grocers. They also ate a good deal of old dried mortar, and swallowed a quantity of small stones, having, as I afterwards found, a true and very firm gizzard. Their note is a clear silvery whistle, more subdued in tone than might have been imagined from a bird of its size, and this when uttered of an evening, with various modulations, after the lamp was lighted in the room where they were kept, was excessively sweet and pleasing. In their actions they somewhat reminded me of starlings playfully snapping at one another with their beaks, as they sat side by side, and occasionally in the most affectionate manner taking food from one another's mouths. The male when thus excited with play was a very striking object, his whole figure full of life and vigour, being drawn up as if standing on tiptoe, with the crest elevated and curving forwards. At times he would amuse as well as exercise himself by hopping sideways on his perch in a very droll manner, and when alarmed by a visitor, or listening to any strange sound his expression of curiosity (the head and neck being stretched out to the fullest extent), mixed with a queer pert manner, was extremely comic."—p. 159.

One other extract, and a very brief one, and I commit the Birds of Norfolk to my readers, feeling thoroughly assured that they will enjoy it as much as I have done:—

Yellowhammer.—"As a cage-bird the yellowhammer, though looking a giant amongst the smaller finches, is exceedingly gentle in manner, maintaining his own rights with a quiet dignity that brooks no insult, though he never interferes with others. In fact, a feathered gentleman, and graceful in action, he floats, rather than flies, from one perch to another, or amuses himself by repeatedly springing into the air, and with a rapid turn of the wings alighting again on the same spot." —p. 197.

I find I have omitted to mention that this is a first volume only: it ends with the Californian quail, the arrangement being that of Mr. Yarrell, so that all the wading and swimming birds, tribes in which Norfolk is peculiarly rich, have yet to be noticed.

EDWARD NEWMAN.

Cat and Squirrels.—On one of the early days of April, this year, I was asked by a bird-fancier to come into a little room in his house in Eton, and see a "novelty," as he called it. This novelty was quite new to me, for it consisted of an old cat bringing up a "happy family" of her own single kitten and four young squirrels. The man told me that the cat saved him much time and trouble by taking the young squirrels off his hands; and he also told me that she had done the same for him last year. It was very curious to observe how carefully she avoided stepping upon them. She evidently liked them as well as her own kitten, and was a very affectionate foster-mother.

They were very young when taken from the nest, and would probably have died unless the old cat had taken pity upon them.—*A. Clark-Kennedy.*

Greenland Seal at Ryde.—Will Captain Hadfield kindly give us further particulars as to the specimen of the Greenland seal said to have been killed near Ryde (Zool. S. S. 700). I have myself no doubt but that it may really be that animal, but the *authentic* occurrences of this species on our shores are so few that it would be a pity should the identification of this example rest on a birdstuffer's examination of the tusks. I trust therefore that either Captain Hadfield himself, or some other equally competent observer, will examine and report on the specimen.—*Edward R. Alston; 205, Bath Street, Glasgow.*

[I cordially concur in this request: I was rather surprised that Captain Hadfield should be content to allow so important a statement to rest on such really slender evidence.—*Edward Newman.*]

Dates of Oviposition this Year.—

Song Thrush.—First nest with eggs on the 3rd of April.

Blackbird.—First eggs on the 4th of April.

Missel Thrush.—First nest with four eggs on the 9th of April.

Rook.—First eggs on the 30th of March.

Lapwing.—The lapwing began to lay about the 6th of April in this neighbourhood. Yesterday the gamekeeper found a nest containing two full-sized eggs and one miniature one shaped and coloured like the common varieties of plovers' eggs, but not larger than the egg of the water ouzel.—*H. W. Feilden; Feniscowles, Blackburn, April* 15, 1867.

Arrival of Summer Visitants in County Wicklow.—It may interest some readers of the 'Zoologist' to know that when crossing a field near here on the 25th of March I observed two birds of the swallow tribe flying about: they did not approach very near me, nor did they stay longer than one minute, but judging from their appearance and flight I think they were the common swallow. Is this not very early for them to arrive? There was snow on the mountains at the time: the wind was blowing hard from S.E. The chiffchaff arrived on the 25th of March also, and on the 1st of April they were very numerous in our woods. The wheatear I saw for the first time yesterday.—*R. M. Barrington; Fassaroe, Bray, County Wicklow, April* 3, 1867. PS. I heard a fieldfare to-day.—*R. M. B.*

Blue and White Varieties of British Birds' Eggs.—In reply to Mr. Clark-Kennedy's query in the April number of the 'Zoologist' (S. S. 706) respecting white varieties of the robin's eggs, I beg to say they are not of uncommon occurrence in this neighbourhood. I have met with several nests containing examples of this variety during the last few years, and have some now in my collection. I have also entirely white eggs of the following birds:—Sparrowhawk, common buzzard, whitethroat, chiffchaff, cole tit, common bunting, blackheaded bunting, yellowhammer, starling, wren and red-legged partridge. I have pale blue varieties of the missel thrush, thrush, blackbird, chaffinch, common guillemot and blackheaded gull: the eggs of the missel thrush and blackbird are slightly blotched with pale reddish brown; the others are entirely clear. I have also some very curious and uncommon varieties of the blackheaded bunting, whitethroat, chaffinch, ptarmigan, ring dotterel, waterhen, common tern, blackheaded gull, &c.: all of which, with the exception of the common buzzard and ptarmigan, were taken in Norfolk.—*T. E. Gunn; 3, West Pottergate, Norwich.*

What gives a Bird a claim to be classed as British?—I am anxious to meet with some definite description of what constitutes the above. In the 'Dictionary' the brown snipe appears as a British bird: Dr. Bree, in his Appendix to the 'Birds of Europe,' says that bird has no claim to be considered a British bird. Morris figures and describes Sabine's snipe. Is it a distinct species? The 'Dictionary' describes it minutely, and then qualifies that description with the suggestion that it is only a dark coloured common snipe; so I infer does Dr. Bree, and what says Yarrell on that point? Take again Steller's western duck and the buffelheaded duck. The list at the end of the 'Dictionary' gives two instances of the former being captured in Britain, and one of the latter. Why then should the former (*vide* Dr. Bree and others) rank as a British bird, and why not the latter? Again, Mr. Gould, in his 'Birds of Britain,' figures the American whitewinged crossbill. The talented editor of the 'Ibis' differs with him on that point (as usual, doctors disagree). Again, once more, why is Bartram's sandpiper excluded from the list of British birds? These, Mr. Editor, are a few queries I would ask respecting British birds; but may I be fortunate enough to elicit some response?—*B. T. S.*

Ring Ouzel in Middlesex in March.—On the 23rd of March, I shot a female ring ouzel near some gravel-pits by the Kingsbury Reservoir. My attention was first attracted by the conspicuous white gorget of the male, but he was too shy to allow of my approaching within gunshot; in fact, it was only by chance that I managed to procure the female. This pair seemed the only individuals in the locality, and on visiting the spot a few days afterwards the male seemed to have departed. Even at a distance their habits would make it impossible to mistake them for blackbirds: when disturbed upon the ground they betook themselves to the tops of the tall trees, instead of hiding in some thick hedge.—*Charles B. Wharton; Willesden, Middlesex, March,* 1867.

Nesting of the Dipper.—Not a hundred yards from our front door, under the arch of a bridge, over which the high road passes, a pair of water ouzels are now nesting; under this same arch is attached transversely a light iron bridge which connects two parts of the pleasure-grounds. This iron bridge is frequently passed over during the day by the gardeners and members of the family, yet in spite of this annoyance the ouzels have built their nest against the arch, about two feet below the iron bridge. They commenced building about the 1st of March: the very cold weather that commenced about the 6th stopped further proceedings, but building was resumed on the 24th, the very day a thaw commenced: by the 31st the outside of the nest was completed, and on the 7th of April there was one egg in the nest: I have not examined it since. I noticed very particularly each day the progress made on this nest: the birds commenced building from the bottom, and then piled a ring of moss, in the shape of the letter O, against the wall: the birds whilst building laid moss alternately on one side and the other, but from similarity of plumage I could not tell whether each bird had a special side to work on or not: by the time the ring of moss was completed the base of the next protruded four or five inches, and at the top about one inch from the wall, the thickness of the walls of the nest also tapering off from bottom to top. When the ring was completed, as I have described, the ouzels changed their tactics, and commenced building down from the top until the whole of the nest was arched over, the entrance being placed over the stream more at the base of the nest than the side. It is wonderful how so large and heavy a structure as this clings to the wall, for where the nest is placed there is only a slight convexity in the face of the stone, hardly appreciable to the eye when the nest is away. Two more pairs of water ouzels are nesting half a mile up this stream, where it passes through a tunnel under the Leeds and Liverpool Canal: from the inside of this tunnel on both sides large blocks of stone protrude from the walls; on these the ouzels build, and the same spots are selected year after year. The shape of the nests in these instances are suited to the position: being placed on a firm flat surface, the birds departed from the shape described in the first instance; instead of building their first round of moss in the shape of the letter O, they built in the form of the letter ∩ inverted, the nests when completed being somewhat in the shape of bee-hives. It is interesting to note these little modifications in the construction of "homes without hands" by birds of the same species. Mr. Hewitson says these birds commence nesting early in April, but here is an instance of their beginning a full month earlier.—*H. W. Feilden.*

Wood Lark in West Sussex.—Lord Clifton asks (S.S. 705) for information respecting the wood lark in the southern counties. My own observations tend to show that it is a scarce bird in this part of Sussex; indeed it is only within the last few years that I have noticed it here in the summer. It is not found in the open part of the country, but affects the sheltered and wooded valleys in some of the higher grounds near Goodwood, for instance: it is also found in some parts of the Weald, but is nowhere numerous. I am inclined to refer the notes I heard in January, 1865 (Zool. 9498) to this species. I was at that time unacquainted with the note of the wood lark. Subjoined is an extract from the 'Field' of January 12th; it is from the pen of Mr. G. Dawson Rowley, of Brighton, and may interest Lord Clifton and perhaps other of your readers, showing that wood larks met with no better reception at Brighton than the phalaropes at Eastbourne, &c.:—"The late frost has made sad havoc among the birds, particularly the Alaudidæ. These appear to have been driven south by the snow till they reached the sea, along the coast of which they wandered westward in search of unattainable safety. On Thursday last, round Brighton, wood larks (*Alauda arborea*) suddenly appeared in every direction, and suffered accordingly by net and gun. One person is said to have shot a hundred of these poor little songsters, not knowing what they were; another has forty alive. These are only two instances out of many. Between Brighton and Rottingdean, I am told, at least one hundred and fifty clapnets were at work on that day, and the guns on the Downs sounded like a review. Bunches of sky larks were offered for sale in every street, *usque ad nauseam.* From all this I fear our copses next spring will be sadly silent, for the plaintive note of the wood lark has been hushed by death."—*W. Jeffery, jun.; Ratham, Chichester, April* 4, 1867.

The Bunting a Bird of Shakespeare.—I have read with great pleasure Mr. Harting's very interesting remarks on the "Birds of Shakespeare," and in consequence of a passage I lately came across I would suggest that another species, the bunting, may be added to the list of British birds mentioned by the poet (Zool. S. S. 354). The passage I allude to is from 'All's Well that Ends Well,' Act ii. Scene 5, where Lafen, on being assured that Parolles really is a good soldier, exclaims, "Then my dial goes not true; I took this lark for a *bunting.*"—*James Shorto, jun.; Dorchester, April* 8, 1867.

Magpie with a Yellow Beak.—Allow me to remind the readers of the 'Zoologist' that in California there is a magpie (*Pica Nuttalli*, Audubon) which corresponds remarkably with the bird seen in Scotland by your correspondent, Mr. Harvie Brown (Zool. S. S. 706). Prof. Baird, in his 'Birds of North America' (p. 578), says of it:—"This species, in every appreciable respect, is precisely similar to the common magpie (*P. hudsonica*, Bonaparte), with the exception of the bill and naked skin around and behind the eye, which are bright yellow. Sometimes this is rendered darker from the fact that the transparency of the horny covering of the bill allows the bone to be seen through it. The size is rather smaller, but this may be the result of its more southern locality. It is a very serious question, whether the bird is anything more than a permanently yellow-billed variety of the common bird. It is well known that in Psilorhinus morio, and other garruline birds, the bill may be either yellow or black, almost in the same brood of young; and if magpies with these differences were habitually associated throughout the continent, there would probably be no hesitation in combining them. The restriction of the yellow-billed magpie to the coast region of California, where it is unmixed with black-billed individuals, except in the northern portion of the State, is an interesting fact." In plate xxvi. of the 'Atlas' to the same work a coloured figure of the head of Pica Nuttalli is given, together with outline sketches of the wing, tail and foot; but (in my copy at least) there is no appearance of the bare yellow skin round the eye which is mentioned in the text. If I am not mistaken the "golden" bill of this magpie used to be the subject of various pleasantries, when California was first overrun by eager seekers of the precious metal for which it has become so famous.—*Alfred Newton; Magdalene College, Cambridge, April* 10, 1867.

[Several other correspondents have communicated with me to the same purport, leaving no doubt on my mind that the unknown visitor was Pica Nuttalli.—*Edward Newman.*]

Food of Great Spotted Woodpecker.—In dissecting the stomach of a male specimen of the great spotted woodpecker, killed on the 2nd of April, near Rendlesham, in Suffolk, I found it contained as many as ten larvæ of Cossus ligniperda of the first year's growth, the skin of a larva of Zeuzera Æsculi, and four or five small white grubs, apparently of some species of beetle.—*T. E. Gunn.*

Early Nesting of the Kingfisher.—Mr. Hewitson's note on the breeding of the kingfisher at Oatlands (Zool. S. S. 707) reminds me that there is a very interesting letter on the same subject in the 'Field' of the 3rd of November, 1866, from the pen of Mr. Rowley. There is more than a month's difference between the dates mentioned by Mr. Rowley and Mr. Hewitson for the kingfisher commencing nidification. Two or three pairs of kingfishers generally breed in our neighbourhood, but they are not at all constant to their old nesting-places: I have hardly ever found them two years running in the same locality. The first kingfisher that I saw this spring was on the 3rd of April. One pair bred last year under the roots of an alder tree on the bank of a fish-pond, the hole only a few inches from the level of the water: another pair in the bank of a small stream; their nest seemed to be in perilous proximity to the water in case of a flood, but the brood was reared in safety. I am happy to say that all the small birds that visit or remain with us during the year are protected from shot and snares, and their nests preserved. There is a standing order forbidding any gardener or keeper, or any one employed about the place, to destroy a bird's nest: the result of this regulation is a large increase in the number of our small birds to what it was some few years ago, when a different policy was pursued, and every nest discovered by the gardener was ruthlessly torn from the branches and thrown into the river.—*H. W. Feilden.*

Stock Doves Breeding in a Church.—You will be interested to hear of an unusual situation for a stock dove's nest. The spire of the old village church here is a wooden one, and has for many a day given shelter to a loving couple of white owls and several pairs of starlings, not to mention the noisy sparrows which have taken possession of the water-spouts. During the summer of 1865 I often remarked a pair of pigeons flying out from a good-sized hole at the base of the spire. They looked like stock doves, but the scarcity of this species here in the breeding season, as well as the unlikely situation which they had selected, caused me to think at the time that they could be only a pair of escaped blue rocks. I could easily have shot one of the birds as he flew out, and thus settled the question, but I was anxious to prove something more. An inspection of the interior of the church, which I unfortunately delayed until the summer was far advanced, showed that a nest, evidently that of a pigeon, had been built upon a cross-beam above the bells. I was too late then for the eggs; the young had flown. There was nothing for it, therefore, but to wait until the following spring, and then endeavour to secure a pair of young birds. Accordingly, jotting down a memorandum in my note-book, and resolving to keep the fact of there being pigeons in the church spire to myself, I waited patiently for another nesting season. My patience has been so far rewarded that, after watching a pair of birds take up their quarter in the same site as that selected the previous year, and after several anxious visits of inspection, I was at length enabled, in July, 1866, to carry off a pair of fine young pigeons, which were almost ready to fly. The "coo" of the stock dove is very peculiar, and by this time I had heard and seen enough of the birds in question to convince me that they belonged to this species. Their young, which I had secured, after being fed for some time in a cage in the house, were transferred to my aviary. They are now in fine plumage, and have proved, as I suspected, to be undoubtedly the young of Columba œnas.—*J. E. Harting; Kingsbury, Middlesex.*

Food of the Wood Pigeon.—Having read the communications of Mr. Blake-Knox and Mr. Cordeaux, in the 'Zoologist' of last month, with reference to the food of the wood pigeon (S. S. 593), I fully agree with them both. Here also they visited our turnip and rape fields during the severe weather of January, and made a field of the latter quite bare, by eating off the leaves and leaving nothing but stalks. In the winter of 1865-66 I shot a wood pigeon which had ninety-eight beech-nuts in its crop. —*R. M. Barrington; Fassaroe, Bray, Co. Wicklow, April* 3, 1867.

Red Grouse and Willow Grouse.—I have just seen Mr. Doubleday's remarks on the willow grouse (Zool. S. S. 707). In one of my former communications touching the identity of this with the British red grouse, I believe I mentioned that in the young birds up to the first moult the plumage of the two were undistinguishable, and until denied by Mr. Doubleday I believe this fact had not been disputed. Speaking of the red grouse, the prevailing epidemic is killing them off by hundreds here. One day last week I picked up five dead birds during a short walk on the moor: some of them were in excellent condition, while others were reduced to mere skeletons. My impression is that the disease is partly owing to the moors being overstocked.—*George Norman; Ben Rhydding, April* 12, 1867.

Golden and Green Plovers (see Zool. S. S. 690).—On the 2nd of January, the morning after the first heavy fall of snow this year, large flocks of peewits continued passing overhead, and from that date until the breaking up of the frost great numbers congregated in certain sheltered bits of water-meadow around here, which continued almost entirely free from ice or snow. There were some small flocks of golden plovers at the same places, but these latter I only saw once or twice, and they were not numerous: within a day or two after the thaw commenced both species left us entirely. On the 18th of March there was another heavy fall of snow; at noon on that day I saw a very large flock of peewits passing overhead and flying S.S.E.; stragglers and small parties continued passing in the same direction at intervals until about 3 P. M., and for some days there were a great many in the water-meadows. At the same time very large flocks of golden plovers appeared in the neighbourhood. I had one of these birds sent to me on the 23rd of March, shot about four miles from here, by a farmer, who told me that he never remembered seeing larger flocks than those which had visited his farm during the previous three days; indeed he said that they were there "in thousands," but very wild and unapproachable. This is an unusually late date for golden plover to be seen here. The bird I received had almost entirely assumed the black throat and breast of the breeding plumage, only a few scattered white feathers being visible.—*James Shorto, jun.*

Occurrence of the Avocet near Weymouth.—I have this day had an opportunity of examining a specimen, in the flesh, of the avocet (*R. avocetta*, Linn.) It was shot yesterday (March 19) by Capt. Pretor, of Belfield House, and is now in the hands of Mr. R. Rolls, of Weymouth, for preservation. It is an adult male, and in excellent plumage. Captain Pretor met with the bird in the Fleetwater, an inlet of the sea estuary from Portland Roads in a westerly direction, and separated from the West Bay by the Chine Beach. This inlet, from Abbotsbury to Micherell, has many small streams emptying into its waters. At low water much mud land is uncovered, and with small rills threading the mud in various directions. At the western end is situated the swannery, and also the decoy, the property of the Earl of Ilchester. It is an excellent feeding-ground for wading birds. I am sorry to say that, in this case at least, the avocet did not visit Dorsetshire willingly. I attribute its appearance to the continued hurricanes from the eastward that we have lately experienced, and fully expect to hear of many rare birds on the eastern coasts. I hear that a hoopoe has been killed here, but I have not yet seen it, although I believe it to be a fact.—*William Thompson; Weymouth, March* 20, 1867.—*From the 'Field' Newspaper.*

Little Bittern in Cornwall.—I have just received another specimen of the little bittern, in fine plumage, in fact exactly the same as the one I received about this time last year from Scilly, which is noted in the 'Zoologist' (Zool. S. S. 311). The present bird was killed in an orchard in the parish of St. Hilary, near St. Michael's Mount. Its weight is just under three ounces; the Scilly bird was three ounces exactly.—*Edward Hearle Rodd; Penzance, April* 12, 1867.

The Smew, Green Sandpiper, &c., in Suffolk.—A fine old male smew was shot about the 17th of January last, near Beccles; about the same date a female specimen of the green sandpiper was obtained near Rendlesham, and on the 29th of March a male of the hooded crow at Worlingham, near Beccles.—*T. E. Gunn.*

Guillemot and Razorbill near Eastbourne.—A few of these birds have been procured, but it is surprising how much scarcer they are than they were a few years since.

So numerous were they in the Channel at the time I am referring to that it was no uncommon thing for a party of two or three guns to kill thirty or forty in an hour or two. Very few breed at Beachy Head now, the ledges on which they used to lay their eggs being swept away by the recent "foundering" of the cliffs.—*John Dutton; Eastbourne, April*, 1867.

Redthroated Diver and Norfolk Plover in Somerset and Devon.—A redthroated diver was picked up dead by a small pond at Bishop's Hall, near Taunton, on Thursday, the 28th of March. Bishop's Hall is a long way, nearly twenty miles, from the sea, and there is no large piece of water near. I saw the skin of this bird at the Museum at Taunton: it was just assuming the summer plumage, as there were a few red feathers on the centre of the throat, and many gray ones were making their appearance on the sides of the throat and on the cheeks. I also had one of these birds sent me from Exmouth on the 29th, in full summer plumage. Is not this rather early for the bird to have assumed this plumage? The Norfolk plover I received from Exmouth on Saturday, the 23rd of March: it had been killed there the day before.—*Cecil Smith; Lydeard House, March* 31, 1867.

Ichthyology of Norfolk.—Being engaged in collecting materials to form a list of all the species inhabiting the rivers and coasts of Norfolk, for publication in the 'Zoologist,' I shall feel particularly obliged to any gentleman for any information or interesting facts relating to the same.—*T. E. Gunn;* 3, *West Pottergate, Norwich.*

Occurrence of two Rare Land Shells in Sussex.—The fine weather which we enjoyed last week tempted me from home, and I walked over the grassy slopes of the South Downs and through the beautiful beech-woods at Harting, Sussex, where I found much to delight the eye of a naturalist. I might descant at some length on the birds plants and shells which attracted my attention in the course of my rambles, but I fear that my enthusiasm would cause me to lose sight of the chief object I have in writing, which is to give you a new locality for two of our rarer land shells, Helix obvoluta and Clausilia Rolphii. During a visit to Up Park I had a great treat in looking through a collection of land and fresh-water shells, formed by an excellent naturalist who resides there, Mr. J. Weaver. The collection, which has been made entirely in Sussex, is a very comprehensive one, and I was interested in observing several of the rarer species well represented by county specimens. Amongst these were Helix obvoluta and Clausilia Rolphii, both of which may be considered, if not rare, at least very local. Mr. Weaver informed me that these shells are not uncommon in Up Park, where he has no difficulty in obtaining specimens. Helix obvoluta, I believe, has generally been found in woods upon the ground, amongst moss, or at the roots of trees; Mr. Weaver tells me that he has collected a great number of his specimens from beech trees, at a considerable height from the ground, and that he was often obliged to detach them with a long switch. Clausilia Rolphii is apparently peculiar to chalky soils, and the locality just mentioned, therefore, is on this account a favourable one.—*J. Edmund Harting; Kingsbury, Middlesex, April* 4, 1867.

10 JU 67

A DICTIONARY OF BRITISH BIRDS.

By EDWARD NEWMAN,

EDITOR OF THE 'ZOOLOGIST' AND 'ENTOMOLOGIST.'

1. In this work the whole of Colonel Montagu's 'Dictionary,' 'Supplement' and 'Appendix' are reprinted in a combined and alphabetical order, the words SUPPLEMENT and APPENDIX being prefixed to whatever is derived from these two sources. Nothing that Montagu has published is omitted or altered.

2. Observation and discovery are incessantly at work: it is no more possible for our knowledge to remain stationary than for this earth to discontinue its rotation; hence the additions which Colonel Montagu found it necessary to make between 1802, the date of the 'Dictionary,' and 1813, the date of the Supplement: these additions, now incorporated, exceed the original work in bulk. In 1833 Mr. Selby published his 'Illustrations of British Ornithology,' and in this work twenty-four species unknown to Colonel Montagu were described. In 1843 Mr. Yarrell published the first edition of his 'History of British Birds;' in 1846 a second edition, and in 1856 a third and final edition: in these three editions that amiable and most painstaking author added, from various sources, no less than fifty-nine species. The 'Zoologist' has added twenty-one species to those mentioned by Montagu, Selby and Yarrell: and here it is but fair to those gentlemen who have made their discoveries known through the medium of that journal, to state that many of Yarrell's species were first published in the 'Zoologist,' and thence transferred to the 'History;' but the credit of such additions is given to the latter work, on account of its systematic character. The descriptions of these added species are extracted from the works of Temminck, Selby and Yarrell, are marked by inverted commas, and accompanied by a reference to the volume and page.

3. Immediately after the name is inserted a reference to a figure of the *bird* and a figure of the *egg:* these references are added both to the original and the new descriptions. For this purpose Yarrell's 'History of British Birds' and Hewitson's 'Oology' have been selected: these works are at present, and for the next half-century will certainly continue, our standard authorities: these interlopations are also enclosed in editorial brackets.

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